



Appendix I

Plants in Growing Media

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Introduction

The European Union (EUN) countries of Belgium, Denmark, Germany, France, Greece, Italy, Luxembourg, The Netherlands, Portugal, Spain, United Kingdom, Austria, Finland, Sweden, and Ireland will accept plants established in growing media (it may include soil in its entirety or in part) originating in non-European countries under the condition that the growing media has been officially certified as being free of prohibited noxious organisms.

APHIS has adopted the position that phytosanitary certification of plants in growing media, if based on sound nursery production procedures, would provide the EUN countries protection against noxious organisms within the confines of the certifying statement on the Federal Phytosanitary Certificate (FPC) and adequately satisfy our obligation to international plant protection.

Therefore, issuing FPC's for plants in growing media is authorized to Belgium, Denmark, Germany, France, Greece, Italy, Luxembourg, The Netherlands, Portugal, Spain, United Kingdom, Austria, Finland, Sweden, and Ireland. The authorization is based on the official certification by an Authorized Certification Official (ACO) that a shipment of plants offered for export has been prepared according to the following procedures of production and sanitation:



Do not use these requirements to certify plants in growing media if the destination is the French Overseas Departments (French Guiana, Guadeloupe, Martinique, and Reunion). Follow the requirements as stated in EXCERPT.

Greenhouse Grown Nursery Stock

- ◆ Nursery routinely disinfects the flats, benches, soil bins, and tools.
- ◆ Plant cuttings are derived from healthy parent stock.
- ◆ Seeds and cuttings are rooted in sterile media in a greenhouse. (Refer to the NOTE at the end of all listed procedures on [page-I-1-4](#))
- ◆ Plants are transplanted or repotted to sterile growing media. (Refer to the NOTE at the end of all listed procedures on [page-I-1-4](#))
- ◆ If established plants are moved outdoors from a greenhouse, they are to be transferred to raised benches or plastic sheeting on the ground.
- ◆ Plants contained in the shipment have been sampled and found to be negative for burrowing nematode (*Radopholus similis*), or are certified as originating in an area where the burrowing nematode is not known to occur.
- ◆ Shipments are supported by a State phytosanitary certificate that attests to the conformity with the above procedures. (State phytosanitary certificates must be converted to FPC's before the export.)

Field Grown Nursery Stock

- ◆ Plants must originate in a nursery currently inspected and certified by the plant regulatory branch of the State government.
- ◆ *Corynebacterium sepedonicum* (potato bacterial ring rot), *Globodera pallida* (a potato cyst nematode), *Globodera rostochiensis* (golden nematode), and *Synchytrium endobioticum* (potato wart), are not known to occur at the place of production. (*Globodera pallida* and *Synchytrium endobioticum* are not known to occur in the United States.)
- ◆ Nursery routinely disinfects the flats, benches, soil bins, and tools.
- ◆ The nursery operator must give 48 hours advance notice to the appropriate certifying official when a root washing and repotting operation is to begin. The certifying official will decide to conduct the phytosanitary inspection throughout the entire preparation process or on a random spot-check basis.

- ◆ Field grown nursery stock are to be washed completely free from soil in an area of the nursery where contamination of other nursery stock, sterile growing media, and holding areas will be avoided. The washing is to be accomplished using clean water under pressure.
- ◆ Plants contained in the shipment (if known to be hosts or if host status is unknown) have been sampled and found to be negative for burrowing nematode (*Radopholus similis*), or are certified as originating in an area where the burrowing nematode is not known to occur.
- ◆ Containerized (potted) plants intended for export to EUN must be segregated from other nursery stock and held in a readily identifiable section of the nursery until shipment.
- ◆ Shipments are supported by a State phytosanitary certificate that attest to the conformity with the above procedures. (State phytosanitary certification must be converted to FPC's before the export.)
- ◆ Plants are to be transplanted into clean containers using sterile growing media. Containers are to be transferred to raised benches or plastic sheeting on the ground.



For the purpose of these certification schemes, an acceptable sterile media must be one of the following categories. Growing media that falls outside the two categories below will not be eligible for certification. However, if the growing media appears to satisfy the general sterility requirement, the process used should be referred for approval to the Export Certification Unit (ECU), PO, Riverdale, MD.

1. A growing medium that has been uniformly pasteurized using aerated steam at 140°F for 30 minutes, or by using live steam at 180°F for 30 minutes. The pasteurization should be conducted using premoistened media and ensuring that the densest portion receives the minimum temperature for the full 30 minutes.
2. A growing medium having component parts of unused peat (peat commercially harvested from a bog not previously used as farmland or any other agricultural purpose), clean sand, sawdust, or wood shavings, and biologically inert fillers such as perlite or vermiculite. (Continued) The certifying official will determine if the growing media is acceptable for this category. The determination will be based on the official's observation and judgment of the sanitary practices used to store, handle, and use the growing media components by the formulator or the nursery.

Procedure Used by Florida State Plant Regulatory Officials to Certify Plants in Growing Media and in Containers 21" or Larger

Introduction

The tagging procedure and the list of approved and prohibited growing media detailed in this appendix are specific to potted plants from Florida being exported to the European Union (EUN). Beginning March 1, 1988, all plants potted in containers 21" or larger intended for export to EUN must be tagged by the Division of Plant Industry (DPI), Florida Department of Agriculture and Consumer Services. After this date, untagged plants in containers 21" or larger will not be certified to the EUN.

Tagging Procedure

When a Florida State plant regulatory official (SPRO) tags a plant, the tag indicates that the plant has been potted in an approved growing media.

The tag is made of durable yellow plastic (5" x 2 11/16") and is attached to the plant with a DPI plastic numbered seal. Each tag with seal costs \$.10. If an additional seal is needed for a large diameter trunk, each additional seal costs \$.10.

The tag reads: "Eligible for EUN Certification." The SPRO will write on the tag the date the plant was certified free of burrowing nematode. This certification is good for 1 year. The tag only indicates that the plant is eligible for certification. It still must meet the plant pest requirements of the importing country at the time of phytosanitary certification.

To initiate the new tagging procedure, SPRO's will tag all plants in 21" containers or larger from known exporters by March 1, 1988. Thereafter, tagging will be done annually at the time of burrowing nematode certification.

Approved Growing Media

The following listed components are approved growing media for plants destined to the EUN:

- ◆ Biologically inert fillers (perlite, vermiculite, etc.)
- ◆ Clean sand
- ◆ Melaleuca
- ◆ Peat, unused (pest commercially harvested from a bog not previously used for farmland or for any other agricultural purpose)

- ◆ Sawdust
- ◆ Wood shavings or wood chips (free of bark)

Prohibited Growing Media

The following listed components are prohibited isolated bark used as growing media for plants destined to the EUN:

- ◆ *Abies* (fir)
- ◆ *Castanea* (chestnut)
- ◆ Coniferae (conifers)
- ◆ *Larix* (larch)
- ◆ *Picea* (spruce)
- ◆ *Populus* (poplar)
- ◆ *Pseudotsuga* (Pineaceae)
- ◆ *Quercus* (oak)
- ◆ *Tsuga* (hemlock)
- ◆ *Ulmus* (elm)

Appendix I: Plants in Growing Media

Procedure Used by Florida State Plant Regulatory Officials to Certify Plants in Growing Media and in Containers 21" or